## **EAST Search History**

## **EAST Search History (Prior Art)**

Ref#	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	35	((SHIGERU) near2 (NISHIO)). INV.	US-PGPUB; USPAT	OR	ON	2009/12/25 18:04
L2	7	((HIRONOBU) near2 (IWASHITA)).INV.	US-PGPUB; USPAT	OR	ON	2009/12/25 18:04
L3	70	((KAZUNORI) near2 (YAMAMOTO)).INV.	US-PGPUB; USPAT	OR	ON	2009/12/25 18:05
L4	44	((KAZUHIRO) near2 (MURATA)).INV.	US-PGPUB; USPAT	OR	ON	2009/12/25 18:05
L9	488	(ink or fluid) and (electric with field) and (coulomb or attract or vacuum) and (nozzle) and (insulating or insulation or dielectric) and frequency and alternating	USPAT	OR	OFF	2009/12/25 18:15
L10	453	((ink or fluid) and (electric with field) and (coulomb or attract or vacuum) and (nozzle) and (insulating or insulation or dielectric) and frequency and @pd<="20020808") and (("25" or "24" or "23" or "22" or "21" or "20" or "19" or "18" or "17" or "16" or "15" or "14" or "13" or "12" or "11" or "10" or "9" or "8" or "7" or "6" or "5" or "4" or "3" or "2" or "11"))	USPAT	OR	OFF	2009/12/25 18:16
<b>S</b> 7	1	"10567710"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/05/13 09:50
S8	1975	SAITO-KOICHI	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/05/13 12:12
<b>S</b> 9	0	"SAITO-KOICHI.inv"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/05/13 12:13

S10	1971	SAITO-KOICHI.inv.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/05/13 12:13
S11	1486	SAITO-KOICHI.inv. and @pd<="20020808"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/05/13 12:16
S12	3	SAITO-KOICHI.inv. and @pd<= "20020808" and electrostatic and suction	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/05/13 12:17
S13	1294	"347"/\$.ccls. and electrostatic and suction	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/05/13 12:23
S14	167	"347"/\$.ccls. and electrostatic and suction and fluid and discharge	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/05/13 12:25
S15	37	"347"/\$.ccls. and electrostatic and suction and fluid and discharge and (nozzle with diameter)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/05/13 12:25
S16	12	"347"/\$.ccls. and (electrostatic with suction) and fluid and discharge and (nozzle with diameter)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/05/13 12:26
S17	0	"347"/\$.ccls. and (electrostatic with suction) and fluid and discharge and (nozzle with diameter) and @pd<="20020808"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/05/13 12:26
S18	7	(electrostatic with suction) and fluid and discharge and (nozzle with diameter) and @pd<="20020808"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/05/13 12:28

S19	1	(09/966907).APP.	USPAT; USOCR	OR	OFF	2008/05/13 12:31
S20	1	(09/818529).APP.	USPAT; USOCR	OR	OFF	2008/05/13 12:34
S21	4	("4333086"   "4734705").PN. OR ("5278583").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2008/05/13 12:39
S22	2	("4333086"   "4734705").PN. OR ("5278583").URPN. and electrostatic and suction	US-PGPUB; USPAT; USOCR	OR	OFF	2008/05/13 12:40
S23	1302	"347"/\$.ccls. and (electrostatic or coulomb) and suction	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/05/13 12:44
S24	529	"347"/\$.ccls. and (electrostatic or coulomb) and suction and @pd<="20020808"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/05/13 12:45
<b>S</b> 25	7	(electrostatic or coulomb) with suction and fluid and discharge and (nozzle with diameter) and @pd<="20020808"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/05/13 12:49
S26	11	("5424162"   "5451482"   "5700617"   "5747209"   "6063537"   "6096468"   "6183927").PN. OR ("6346356").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2008/05/13 12:56
S27	7	("5424162"   "5451482"   "5700617"   "5747209"   "6063537"   "6096468"   "6183927").PN. OR ("6346356").URPN. and (electrostatic or coulomb) with suction and fluid and discharge and (nozzle with diameter) and @pd<="20020808"	US-PGPUB; USPAT; USOCR	OR	OFF	2008/05/13 12:58
S28	,	(("5424162"   "5451482"   "5700617"   "5747209"   "6063537"   "6096468"   "6183927").PN. OR ("6346356").URPN.) and (electrostatic or coulomb) with suction and fluid and discharge and (nozzle with diameter) and @pd<="20020808"	US-PGPUB; USPAT; USOCR	OR	OFF	2008/05/13 12:59

S29	7	("5424162"   "5451482"   "5700617"   "5747209"   "6063537"   "6096468"   "6183927").PN. OR ("6346356").URPN. and (electrostatic or coulomb) with suction and fluid and discharge and (nozzle with diameter) and @pd<="20020808"	US-PGPUB; USPAT; USOCR	OR	OFF	2008/05/13 13:10
S30	1	(("5424162"   "5451482"   "5700617"   "5747209"   "6063537"   "6096468"   "6183927").PN. OR ("6346356").URPN.) and (electrostatic or coulomb) with suction and fluid and discharge and (nozzle with diameter) and @pd<="20020808"	US-PGPUB; USPAT; USOCR	OR	OFF	2008/05/13 13:11
S31	24	("20010025690"   "20020096085"   "20020135650"   "20030010252"   "20030038869"   "4554555"   "4588998"   "4620876"   "4700203"   "4994110"   "5431720"   "5462592"   "5514208"   "5605566"   "5622550"   "5637138"   "5810915"   "5879439"   "5882390"   "6120589"   "6261349"   "6613136"   "6637875").PN. OR ("6899751").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2008/05/13 13:13
S32	0	(("20010025690"   "20020096085"   "20020135650"   "20030010252"   "20030038869"   "4554555"   "4588998"   "4620876"   "4700203"   "4994110"   "5431720"   "5462592"   "5514208"   "5605566"   "5622550"   "5637138"   "5810915"   "5879439"   "5882390"   "6120589"   "6261349"   "6613136"   "6637875").PN. OR ("6899751").URPN.) and (electrostatic or coulomb) with suction and fluid and discharge and (nozzle with diameter) and @pd<="20020808"	US-PGPUB; USPAT; USOCR	OR	OFF	2008/05/13 13:18

S33	0	(("20010025690"   "20020096085"   "20020135650"   "20030010252"   "20030038869"   "4554555"   "4588998"   "4620876"   "4700203"   "4994110"   "5431720"   "5462592"   "5514208"   "5605566"   "5622550"   "5637138"   "5810915"   "5879439"   "5882390"   "6120589"   "6261349"   "6613136"   "6637875").PN. OR ("6899751").URPN.) and (electrostatic or coulomb) with suction and fluid and discharge and (nozzle with diameter) and @pd<="20020808"	US-PGPUB; USPAT; USOCR	OR	OFF	2008/05/13
S34	,O	(("20010025690"   "20020096085"   "20020135650"   "20030010252"   "20030038869"   "4554555"   "4588998"   "4620876"   "4700203"   "4994110"   "5431720"   "5462592"   "5514208"   "5605566"   "5622550"   "5637138"   "5810915"   "5879439"   "5882390"   "6120589"   "6261349"   "6613136"   "6637875").PN. OR ("6899751").URPN.) and (electrostatic or coulomb) with suction and (fluid and discharge) and (nozzle with diameter) and @pd<="20020808"	US-PGPUB; USPAT; USOCR	OR	OFF	2008/05/13 13:20
S35	O	(("20010025690"   "20020096085"   "20020135650"   "20030010252"   "20030038869"   "4554555"   "4588998"   "4620876"   "4700203"   "4994110"   "5431720"   "5462592"   "5514208"   "5605566"   "5622550"   "5637138"   "5810915"   "5879439"   "5882390"   "6120589"   "6261349"   "6613136"   "6637875").PN. OR ("6899751").URPN.) and (electrostatic or coulomb) with suction and (fluid and	US-PGPUB; USPAT; USOCR	OR	OFF	2008/05/13 13:20

		discharge) and (nozzle same diameter) and @pd<= "20020808"				
S36	0	(("20010025690"   "20020096085"   "20020135650"   "20030010252"   "20030038869"   "4554555"   "4588998"   "4620876"   "4700203"   "4994110"   "5431720"   "5462592"   "5514208"   "5605566"   "5622550"   "5637138"   "5810915"   "5879439"   "5882390"   "6120589"   "6261349"   "6613136"   "6637875").PN. OR ("6899751").URPN.) and (electrostatic or coulomb) with suction and (fluid and discharge) and (nozzle) and @pd< = "20020808"	US-PGPUB; USPAT; USOCR	OR	OFF	2008/05/13 13:20
S37	14	("4718340"   "5142296"   "5182990"   "5428380"   "5734398"   "5801732"   "5868075"   "5923348"   "6152037"   "6172689"   "6341559").PN. OR ("6470799").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2008/05/13 13:21
S38	0	(("4718340"   "5142296"   "5182990"   "5428380"   "5734398"   "5801732"   "5868075"   "5923348"   "6152037"   "6172689"   "6341559").PN. OR ("6470799").URPN.) and (electrostatic or coulomb) with suction and fluid and discharge and (nozzle with diameter) and @pd<="20020808"	US-PGPUB; USPAT; USOCR	OR	OFF	2008/05/13 13:21
S39	21	("3596275"   "3928855"   "3949410"   "4018383"   "4220958"   "4314263"   "4568946").PN. OR ("4734705").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2008/05/13 13:22
S40	0	(("3596275"   "3928855"   "3949410"   "4018383"   "4220958"   "4314263"   "4568946").PN. OR ("4734705").URPN.) and (electrostatic or coulomb) with suction and fluid and discharge and (nozzle with diameter) and @pd<="20020808"	US-PGPUB; USPAT; USOCR	OR	OFF	2008/05/13 13:22

S41	28	("3060429"   "3553719"   "3750564"   "3787879"   "3911448"   "4263601").PN. OR ("4333086").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2008/05/13 13:23
S42	0	(("3060429"   "3553719"   "3750564"   "3787879"   "3911448"   "4263601").PN. OR ("4333086").URPN.) and (electrostatic or coulomb) with suction and fluid and discharge and (nozzle with diameter) and @pd<="20020808"	US-PGPUB; USPAT; USOCR	OR	OFF	2008/05/13 13:23
S43	16	("5300387"   "5738966"   "5776647"   "5863692"   "5948582"   "5948584").PN. OR ("6096468").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2008/05/13 13:24
S44	7	("5300387"   "5738966"   "5776647"   "5863692"   "5948582"   "5948584").PN. OR (("6096468").URPN.) and (electrostatic or coulomb) with suction and fluid and discharge and (nozzle with diameter) and @pd<="20020808"	US-PGPUB; USPAT; USOCR	OR	OFF	2008/05/13 13:24
S45	3	("101"/ "466") and ((electrostatic or coulomb) same (suction and fluid and discharge) and (nozzle with diameter))	USPAT	OR	OFF	2008/05/13 13:36
S46	1	(106/31.6) and (electrostatic or coulomb) same (suction and fluid and discharge) and (nozzle with diameter)	USPAT	OR	OFF	2008/05/13 13:38
S47	4	(347/2, S26 "55", "75", "100", "104") and ((electrostatic or coulomb) same (suction and fluid and discharge) and (nozzle with diameter))	USPAT	OR	OFF	2008/05/13 13:39
S48	0	(430/108.3, "110.3", "110.4", "123.5", "137.17") and ((electrostatic or coulomb) same (suction and fluid and discharge) and (nozzle with diameter))	USPAT	OR	OFF	2008/05/13 13:39
S49	4	S45 or S46 or S47	USPAT	OR	OFF	2008/05/13 13:40
S50	1099	(ink or fluid) and (electric with field) and (coulomb or attract or vacuum) and (nozzle) and (insulating or insulation or dielectric) and frequency	USPAT	OR	OFF	2008/05/13 14:25

S51	453	(ink or fluid) and (electric with field) and (coulomb or attract or vacuum) and (nozzle) and (insulating or insulation or dielectric) and frequency and @pd<= "20020808"	USPAT	OR	OFF	2008/05/13 14:37
S52	13	((ink or fluid) and (electric with field) and (coulomb or attract or vacuum) and (nozzle) and (insulating or insulation or dielectric) and frequency and @pd<="20020808") and (("25" or "24" or "23" or "22" or "21" or "20" or "19" or "18" or "17" or "16" or "15" or "14" or "13" or "12" or "11" or "10" or "9" or "8" or "7" or "6" or "5" or "4" or "3" or "2" or "1") with (".mu.m" or micrometer or (micro adj meter)))	USPAT	OR	OFF	2008/05/13 14:53
S53	4	((ink or fluid) and (electric with field) and (coulomb or attract or vacuum) and (insulating or insulation or dielectric) and frequency and @pd<="20020808") and (("25" or "24" or "23" or "22" or "21" or "20" or "19" or "18" or "17" or "16" or "15" or "14" or "13" or "12" or "11" or "10" or "9" or "8" or "7" or "6" or "5" or "4" or "3" or "2" or "1") with (".mu.m" or micrometer or (micro adj meter)) with (nozzle or hole or opening))	USPAT	OR	OFF	2008/05/13 14:55
S54	7	((ink or fluid) and (electric with field) and (coulomb or attract or vacuum) and (insulating or insulation or dielectric) and (frequency)) and (("25" or "24" or "23" or "22" or "21" or "20" or "19" or "18" or "17" or "16" or "15" or "14" or "13" or "12" or "11" or "10" or "9" or "8" or "7" or "6" or "5" or "4" or "3" or "2" or "1") with (".mu.m" or micrometer or (micro adj meter)) with (nozzle or hole or opening or port))	USPAT	OR	OFF	2008/05/13 15:00

S55	41	((ink or fluid) and (electric with field) and (coulomb or attract or vacuum) and (nozzle) and (insulating or insulation or dielectric) and frequency and @pd<="20020808") and (("25" or "24" or "23" or "22" or "21" or "20" or "19" or "18" or "17" or "16" or "15" or "14" or "13" or "12" or "11" or "10" or "9" or "8" or "7" or "6" or "5" or "4" or "3" or "2" or "1") with (".mu.m" or micrometer or (micro adj meter)))	USPAT	OR	ON	2008/05/13
S56	41	((ink or fluid) and (electric with field) and (coulomb or attract or vacuum) and (nozzle) and (insulating or insulation or dielectric) and frequency and @pd<="20020808") and (("25" or "24" or "23" or "22" or "21" or "20" or "19" or "18" or "17" or "16" or "15" or "14" or "13" or "12" or "11" or "10" or "9" or "8" or "7" or "6" or "5" or "4" or "3" or "2" or "1") with (".mu.m" or micrometer or (micro adj meter)))	USPAT	OR	ON	2008/05/13
S57	41	((ink or fluid) and (electric with field) and (coulomb or attract or vacuum) and (nozzle) and (insulating or insulation or dielectric) and frequency and @pd<="20020808") and (("25" or "24" or "23" or "22" or "21" or "20" or "15" or "18" or "17" or "16" or "15" or "14" or "13" or "12" or "11" or "10" or "9" or "8" or "7" or "6" or "5" or "4" or "3" or "2" or "1") with (".mu.m" or micrometer or (micro adj meter)))	USPAT	OR	ON	2008/05/13

<b>S</b> 58	8	((ink or fluid) and (electric with field) and (coulomb or attract or vacuum) and (insulating or insulation or dielectric) and frequency and @pd<= "20020808") and (("25" or "24" or "23" or "22" or "21" or "20" or "19" or "18" or "17" or "16" or "15" or "14" or "13" or "12" or "11" or "10" or "9" or "8" or "7" or "6" or "5" or "4" or "3" or "2" or "1") with (".mu.m" or micrometer or (micro adj meter)) with (diameter))	USPAT	OR	ON	2008/05/13 16:23
<b>S</b> 59	14	(US-5278583-\$ or US-6899751-\$ or US-6470799-\$ or US-4734705-\$ or US-4333086-\$ or US-6096468-\$ or US-6623113-\$ or US-6562099-\$ or US-6513909-\$ or US-5489929-\$ or US-3596275-\$ or US-6340216-\$ or US-6126274-\$ or US-6116718-\$).did.	USPAT	OR	OFF	2008/05/13 16:27
<b>\$60</b>	14	((US-5278583-\$ or US-6899751-\$ or US-6470799-\$ or US-4734705-\$ or US-4333086-\$ or US-6096468-\$ or US-6623113-\$ or US-6562099-\$ or US-6513909-\$ or US-5489929-\$ or US-3596275-\$ or US-6340216-\$ or US-6126274-\$ or US-6116718-\$).did.) and (electric or electrostatic) and (ink or fluid or liquid)	USPAT	OR	OFF	2008/05/13 16:30
S61	5	((US-5278583-\$ or US-6899751-\$ or US-6470799-\$ or US-4734705-\$ or US-4333086-\$ or US-6096468-\$ or US-6623113-\$ or US-6562099-\$ or US-6513909-\$ or US-5489929-\$ or US-3596275-\$ or US-6340216-\$ or US-6126274-\$ or US-6116718-\$).did.) and (electric or electrostatic) and (ink or fluid or liquid) and (voltage with drive)	USPAT	OR	OFF	2008/05/13 16:32

S62	0	((US-5278583-\$ or US-6899751-\$ or US-6470799-\$ or US-4734705-\$ or US-4333086-\$ or US-6096468-\$ or US-6623113-\$ or US-6562099-\$ or US-5489929-\$ or US-3596275-\$ or US-6340216-\$	USPAT	OR	OFF	2008/05/13 16:35
		or US-6126274-\$ or US-6116718-\$).did.) and (electric or electrostatic) and (ink or fluid or liquid) and (voltage with drive) and (nozzle or hole or port or opening) with (("25" or "24" or "23" or "22" or "21" or "20" or "19" or "18" or "17" or "16" or "15" or "14" or "13" or "12" or "11" or "10" or "9" or "8" or "7" or "6" or "5" or "4" or "3" or "2" or "1") with (".mu.m" or micrometer or (micro adj meter)))				
S63	92	(@pd<="20020808") and (("25" or "24" or "23" or "22" or "21" or "20" or "19" or "18" or "17" or "16" or "15" or "14" or "13" or "12" or "11" or "10" or "9" or "8" or "7" or "6" or "5" or "4" or "3" or "2" or "1") with (".mu.m" or micrometer or (micro adj meter)) with (nozzle or hole or port) with (diameter) and (ink))	USPAT	OR	ON	2008/05/13 16:39
S64	24	(US-5278583-\$ or US-6899751-\$ or US-6470799-\$ or US-4734705-\$ or US-4333086-\$ or US-6096468-\$ or US-6623113-\$ or US-6562099-\$ or US-6513909-\$ or US-5489929-\$ or US-3596275-\$ or US-6340216-\$ or US-6126274-\$ or US-6328393-\$ or US-6299941-\$ or US-6277183-\$ or US-6276792-\$ or US-6184268-\$ or US-5764247-\$ or US-4801955-\$ or US-4801954-\$ or US-4673951-\$ or US-4364057-\$). did.	USPAT	OR	OFF	2008/05/14 08:46

S65	0	((US-5278583-\$ or US-6899751-\$ or US-6470799-\$ or US-4734705-\$ or US-4333086-\$ or US-6096468-\$ or US-6623113-\$ or US-6562099-\$ or US-6513909-\$ or US-5489929-\$ or US-3596275-\$ or US-6340216-\$ or US-6126274-\$ or US-6116718-\$ or US-6328393-\$ or US-6299941-\$ or US-6277183-\$ or US-6276792-\$ or US-6184268-\$ or US-5764247-\$ or US-4801955-\$ or US-4801954-\$ or US-4801955-\$ or US-4801954-\$ or US-4801955-\$ or US-4801954-\$ or US-4801955-\$ or US-4801954-\$ or US-473951-\$ or US-4364057-\$). did.) and (@pd<="20020808") and (("25" or "24" or "23" or "22" or "21" or "20" or "19" or "18" or "17" or "16" or "15" or "14" or "13" or "12" or "11" or "10" or "9" or "8" or "7" or "6" or "5" or "4" or "3" or "2" or "1") with (".mu.m" or micrometer or (micro adj meter)) with (nozzle or hole or port) with (diameter) and (ink))	USPAT	OR	:	2008/05/14
S66	10	(US-6328393-\$ or US-6299941-\$ or US-6277183-\$ or US-6276792-\$ or US-6184268-\$ or US-5764247-\$ or US-4801954-\$ or US-4673951-\$ or US-4364057-\$).did.	USPAT	OR	•	2008/05/14 08:50
S67	19	or US-6276792-\$ or US-	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/05/14 09:08
S68	6	((US-5278583-\$ or US-6899751-\$ or US-6470799-\$ or US-4734705-\$ or US-4333086-\$ or US-6096468-\$ or US-6623113-\$ or US-6562099-\$ or US-6513909-\$ or US-5489929-\$ or US-3596275-\$ or US-6340216-\$ or US-6126274-\$ or US-6328393-\$ or US-6299941-\$ or US-6277183-\$ or US-6276792-\$ or US-6184268-\$ or US-5764247-\$ or US-4801955-\$	USPAT	OR	OFF	2008/05/15 09:36

		or US-4801954-\$ or US-4673951-\$ or US-4364057-\$). did.) and ((platen or substrate) same (charge or polarized or attract))				
S69	4	((US-5278583-\$ or US-6899751-\$ or US-6470799-\$ or US-4734705-\$ or US-4333086-\$ or US-6096468-\$ or US-6623113-\$ or US-6562099-\$ or US-6513909-\$ or US-5489929-\$ or US-3596275-\$ or US-6340216-\$ or US-6126274-\$ or US-6116718-\$ or US-6328393-\$ or US-6299941-\$ or US-62792-\$ or US-6184268-\$ or US-5764247-\$ or US-4801955-\$ or US-4801954-\$ or US-4801954-\$ or US-4801955-\$ o	USPAT	OR	OFF	2008/05/15 10:25
S70	1	((US-5278583-\$ or US-6899751-\$ or US-6470799-\$ or US-4734705-\$ or US-4333086-\$ or US-6096468-\$ or US-6623113-\$ or US-6562099-\$ or US-6513909-\$ or US-5489929-\$ or US-3596275-\$ or US-6340216-\$ or US-6126274-\$ or US-6116718-\$ or US-6328393-\$ or US-6299941-\$ or US-6277183-\$ or US-6276792-\$ or US-6184268-\$ or US-5764247-\$ or US-4801955-\$ or US-4801954-\$ or US-4801955-\$	USPAT	OR	OFF	2008/05/15

S71	4	((US-5278583-\$ or US-6899751-\$ or US-6470799-\$ or US-4734705-\$ or US-4333086-\$ or US-6096468-\$ or US-6623113-\$ or US-6562099-\$ or US-6513909-\$ or US-5489929-\$ or US-3596275-\$ or US-6340216-\$ or US-6126274-\$ or US-6126274-\$ or US-6227183-\$ or US-6276792-\$ or US-6184268-\$ or US-5764247-\$ or US-4801955-\$ or US-4801954-\$ or US-4801955-\$ or US-4801954-\$ or US-4673951-\$ or US-4364057-\$). did.) and ((platen or substrate) same (charge or polarized or attract)) and (insulate or insulation or dielectric)	USPAT	OR	OFF	2008/05/15 14:04
S72	3	((US-5278583-\$ or US-6899751-\$ or US-6470799-\$ or US-4734705-\$ or US-4333086-\$ or US-6096468-\$ or US-6623113-\$ or US-6562099-\$ or US-6513909-\$ or US-5489929-\$ or US-3596275-\$ or US-6340216-\$ or US-6126274-\$ or US-6126274-\$ or US-6277183-\$ or US-6276792-\$ or US-6184268-\$ or US-5764247-\$ or US-4801955-\$ or US-4801954-\$ or US-4801955-\$ or US-4801954-\$ or US-4801954-\$ or US-4673951-\$ or US-4364057-\$). did.) and ((platen or substrate) same (charge or polarized or attract)) and (insulate or insulation or dielectric) and laser and photosensitive	USPAT	OR	OFF	2008/05/15 16:42
S73	1	US-6096468-\$	USPAT	OR	OFF	2008/05/19 08:27

S74	6	((US-5278583-\$ or US-6899751-\$ or US-6470799-\$ or US-4734705-\$ or US-4333086-\$ or US-6096468-\$ or US-6623113-\$ or US-6562099-\$ or US-6513909-\$ or US-5489929-\$ or US-3596275-\$ or US-6340216-\$ or US-6126274-\$ or US-6126274-\$ or US-6277183-\$ or US-6276792-\$ or US-6184268-\$ or US-5764247-\$ or US-4801955-\$ or US-4801954-\$ or US-4801954-\$ or US-4673951-\$ or US-4364057-\$). did.) and laser	USPAT	OR	OFF	2008/05/19 17:38
S75	4	(US-6096468-\$ or US- 6340216-\$ or US-6126274-\$ or US-6328393-\$).did.	USPAT	OR	OFF	2008/05/20 09:43
S76	24	(US-5278583-\$ or US-6899751-\$ or US-6470799-\$ or US-4734705-\$ or US-4333086-\$ or US-6096468-\$ or US-6623113-\$ or US-6562099-\$ or US-6513909-\$ or US-5489929-\$ or US-3596275-\$ or US-6340216-\$ or US-6126274-\$ or US-6126274-\$ or US-6277183-\$ or US-6276792-\$ or US-6184268-\$ or US-5764247-\$ or US-4801955-\$ or US-4801954-\$ or US-4364057-\$). did.	USPAT	OR	ON	2008/11/26 10:50
S77	1	S76 and ((alternate or alternated or alternating or switch or switched or switching) with (polarity))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/11/26 11:37
S78	267	"347"/\$.ccls. and ((alternate or alternated or alternating or switch or switched or switching) with (voltage with polarity))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/11/26 11:45
S79	191	"347"/\$.ccls. and ((alternate or alternated or alternating or switch or switched or switching) with (voltage with polarity)) and @pd<="20040805"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/11/26 11:46

S80	10	"347"/\$.ccls. and ((alternate or alternated or alternating or switch or switched or switching) with (voltage with polarity)) with (fluid or ink) and @pd<="20040805"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/11/26 11:47
S81	2	"20070064066".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/12/02 15:28
S82	0	"55"/\$.ccls. and ((alternate or alternated or alternating or bipolar) with (polarity) with (pulse) with (drive))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/12/02 17:34
S83	0	347/55 and ((alternate or alternated or alternating or bipolar) with (polarity) with (pulse) with (drive))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/12/02 17:34
S84	7	"347"/\$.ccls. and ((alternate or alternated or alternating or bipolar) with (polarity) with (pulse) with (drive))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/12/02 17:34
S85	2	"20060262163".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/12/02 17:40
S86	6	"347"/\$.ccls. and ((alternate or alternated or alternating or bipolar) with (polarity) with (pulse) with (drive)) and @pd<="20040805"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/12/02 17:41
S87	52	"347"/\$.ccls. and ((alternate or alternated or alternating or bipolar) with (polarity or charge or voltage) with (drive)) and @pd<="20040805"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/12/02 17:46
S88	7	"347"/\$.ccls. and ((alternate or alternated or alternating or bipolar) with (polarity or charge or voltage) with (drive) with (ink or fluid)) and @pd<="20040805"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/12/02 17:50

S89	2	"347"/\$.ccls. and ((alternate or alternated or alternating or bipolar) with (polarity or charge or voltage) with (drive) with (ink or fluid)) and @pd<="20040805" and (hz or cycle)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/12/02 18:12
S90		"347"/\$.ccls. and ((alternate or alternated or alternating or bipolar) with (polarity or charge or voltage) with (drive) with (ink or fluid)) and @pd<="20040805" and (Hz or cycle)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/12/02 18:13
S91	2	"347"/\$.ccls. and ((alternate or alternated or alternating or bipolar) with (polarity or charge or voltage) with (drive) with (ink or fluid)) and @pd<="20040805" and (?Hz or cycle)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/12/02 18:15
S92	1	"347"/\$.ccls. and ((alternate or alternated or alternating or bipolar) with (polarity or charge or voltage) with (drive) with (ink or fluid) with (drop or droplet)) and @pd<= "20040805" and (?Hz or cycle)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/12/02 18:27
S93	1	(US-20060262163-\$).did.	US-PGPUB	OR	ON	2008/12/02 18:31
S95	1	((US-20060262163-\$).did.) and (target and nozzle and hole)	US-PGPUB	OR	ON	2008/12/02 18:37
S96	40	"347"/\$.ccls. and ((alternate or alternated or alternating or bipolar) with (polarity or charge or voltage) with (drop or droplet)) and @pd<="20040805" and (?Hz or cycle)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/12/02 18:46
S97	81	"347"/\$.ccls. and ((alternate or alternated or alternating or bipolar) with (polarity or charge or voltage) with (drop or droplet)) and @pd<="20040805"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/12/02 18:48
S98	0	"347"/\$.ccls. and ((alternate or alternated or alternating or bipolar) with (polarity or charge or voltage) with (drop or droplet) same (target or platen)) and @pd<="20040805"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/12/02 18:49

S99	81	"347"/\$.ccls. and ((alternate or alternated or alternating or bipolar) with (polarity or charge or voltage) with (drop or droplet)) and @pd<= "20040805"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/12/02 18:50
S100	96	"347"/\$.ccls. and ((alternate or alternated or alternating or bipolar) with (polarity or charge or voltage) with (nozzle or drop or droplet)) and @pd<="20040805"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/12/02 18:59
S101	52	"347"/\$.ccls. and ((alternate or alternated or alternating or bipolar) near4 (polarity or charge or voltage)) with ((nozzle or drop or droplet)) and @pd<="20040805"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/12/02 19:00
S102	217	"347"/\$.ccls. and ((alternate or alternated or alternating or bipolar) near4 (polarity or charge or voltage)) with ((electrode or nozzle or drop or droplet)) and @pd<= "20040805"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/12/02 19:34
S103	237	"347"/\$.ccls. and ((alternate or alternated or alternating or bipolar) near4 (polarity or charge or voltage)) with ((electrode or nozzle or drop or droplet or ink)) and @pd<="20040805"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/12/02 19:36
S104	15	"347"/\$.ccls. and ((alternate or alternated or alternating or bipolar) near4 (polarity or charge or voltage)) with ((electrode or nozzle or drop or droplet or ink)) same (drive) and @pd<= "20040805"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/12/02 20:02
S105	29	"347"/\$.ccls. and ((alternate or alternated or alternating or bipolar) near4 (polarity or charge or voltage)) with ((electrode or nozzle or drop or droplet or ink)) same (drive or driving) and @pd<="20040805"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/12/02 20:02

S106	1	"347"/\$.ccls. and ((alternate or alternated or alternating or bipolar) with ((drive or driving) with (signal or voltage))) with ((alternate or alternating) with (charge) with (nozzle or drops or droplets)) and @pd<="20040805"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/12/02 20:24
S107	2	"347"/\$.ccls. and ((alternate or alternated or alternating or bipolar) with (drive or driving) with (signal or voltage)) with ((alternate or alternating or bipolar) with (charge or polarity) with (nozzle or drops or droplets)) and @pd<= "20040805"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/12/02 20:35
S108	8	(US-5838349-\$ or US-3846800-\$ or US-3739396-\$ or US-6505920-\$ or US-5363131-\$ or US-3833910-\$ or US-4328505-\$).did. or (JP-02178055-\$).did.	USPAT; JPO	OR	ON	2008/12/03 08:09
S109	0	((US-5838349-\$ or US- 3846800-\$ or US-3739396-\$ or US-6505920-\$ or US- 5363131-\$ or US-3833910-\$ or US-4328505-\$).did. or (JP- 02178055-\$).did.) and suction	USPAT; JPO	OR	ON	2008/12/03 08:10
S110	134	"347"/\$.ccls. and @pd<="20030808" and ((electrostatic) near4 (suction attract\$3)) and ((bipolar alternat\$3 alternatively) near4 (drop droplets))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/07/21 10:52
S111	36	"347"/\$.ccls. and @pd<="20030808" and ((electrostatic) near4 (suction attract\$3) near4 (apparatus method type)) and ((bipolar alternat\$3 alternatively) near4 (drop droplets))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/07/21 11:01
S112	15	"347"/55 and @pd<="20030808" and ((electrostatic) near4 (suction attract\$3) near4 (apparatus method type)) and ((bipolar alternat\$3 alternatively) near4 (drop droplets))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/07/21 11:02

S113	0	"347"/55 and @pd<= "20030808" and ((electrostatic) near4 (suction attract\$3) near4 (apparatus method type)) and ((bipolar alternat\$3 alternatively) near4 (drop droplets) near4 (polarity charg\$2))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/07/21 11:05
S114	1	"347"/55 and @pd<= "20030808" and ((electrostatic) near4 (suction attract\$3) near4 (apparatus method type)) and ((bipolar alternat\$3 alternatively) near9 (drop droplets) near9 (polarity charg\$2))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/07/21 11:06
S115	1	"347"/55 and @pd<= "20030808" and ((electrostatic) near4 (suction attract\$3) near9 (apparatus method type)) and ((bipolar alternat\$3 alternatively) near9 (drop droplets) near9 (polarity charg\$2))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/07/21 11:08
S116	3	"347"/55 and @pd<= "20030808" and ((electrostatic) near4 (suction attract\$3) near9 (apparatus method type)) and ((bipolar alternat\$3 alternatively positive) near9 (drop droplets) near9 (polarity charg\$2))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/07/21 11:09
S117	3	"347"/55 and @pd<="20030808" and ((electrostatic) near4 (suction attract\$3) near9 (apparatus method type drop\$on \$demand)) and ((bipolar alternat\$3 alternatively positive) near9 (drop droplets) near9 (polarity charg\$2))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/07/21 11:31
S118	1	"56098172".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/07/21 17:06

## **EAST Search History (Interference)**

Ref # Hits Search Query	DBs	Default Operator Plurals Time Stamp

L5	3	(((SHIGERU) near2 (NISHIO)).INV.) and (alternate alternated alternately alternating)	USPAT; UPAD	OR	ON	2009/12/25 18:06
L6	0	(((HIRONOBU) near2 (IWASHITA)).INV.) and (alternate alternated alternately alternating)	USPAT; UPAD	OR	ON	2009/12/25 18:08
L7	9	(((KAZUNORI) near2 (YAMAMOTO)).INV.) and (alternate alternated alternately alternating)	USPAT; UPAD	OR	ON	2009/12/25 18:08
L8	6	(((KAZUHIRO) near2 (MURATA)).INV.) and (alternate alternated alternately alternating)	USPAT; UPAD	OR	ON	2009/12/25 18:10

## 12/25/2009 6:19:26 PM

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